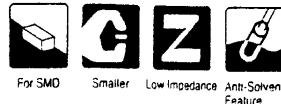


ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

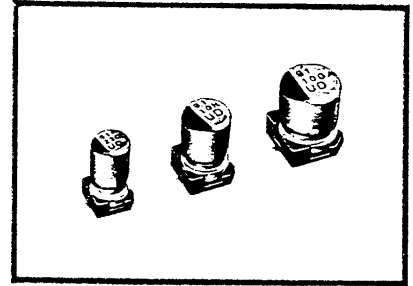
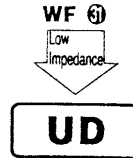
UD

Chip Type, Low Impedance
series



- Chip type, low impedance temperature range up to +105°C.
- Designed for surface mounting on high density PC board.
- Applicable to automatic mounting machine using carrier tape.

345-0314

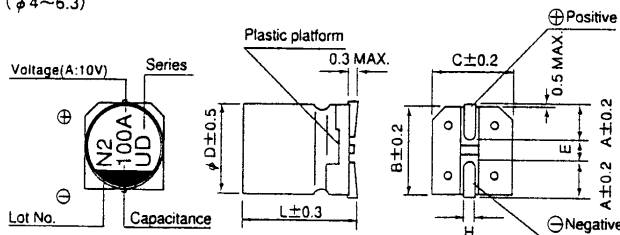


Specifications

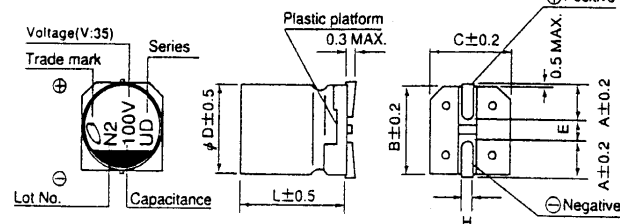
Item	Performance Characteristics							
Operating Temperature Range	-55~+105℃							
Voltage Range	6.3~50V							
Capacitance Range	1~1500 μF							
Capacitance Tolerance	±20% at 120Hz, 20℃							
Leakage Current	After 2 minutes' application of rated voltage, leakage current is not more than 0.01 CV or 3 (μA), whichever is greater.							
tan δ	Measurement frequency : 120Hz, Temperature : 20℃							
	Rated voltage (V)	6.3	10	16	25	35	50	
	tan δ (MAX.)	0.24(0.28)	0.20(0.24)	0.16(0.20)	0.14(0.16)	0.12(0.14)	0.10(0.12)	
Stability at Low Temperature	Measurement frequency : 120Hz							
	Rated voltage (V)		6.3	10	16	25	35	50
	Impedance ratio	Z-25℃ / Z+20℃	3	2	2	2	2	2
	ZT/Z20 (MAX.)	Z-55℃ / Z+20℃	5	4	4	3	3	3
Load Life	After 1000 hours' application of rated voltage at 105℃, they meet the specified value for life characteristics listed below.			Capacitance change		Within ±25% of initial value		
				tan δ		200% or less of initial specified value		
				Leakage current		Initial specified value or less		
Shelf Life	After leaving capacitors under no load at 105℃ for 1000 hours, they meet the specified value for load life characteristics listed above.							
Resistance to soldering heat	The capacitors shall be kept on the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the characteristics requirements listed at right.			Capacitance change		Within ±10% of initial value		
				tan δ		Initial specified value or less		
				Leakage current		Initial specified value or less		
Marking	Black print on the case top.							
Applicable Standards	JIS C 5141 and JIS C 5102.							

Chip Type

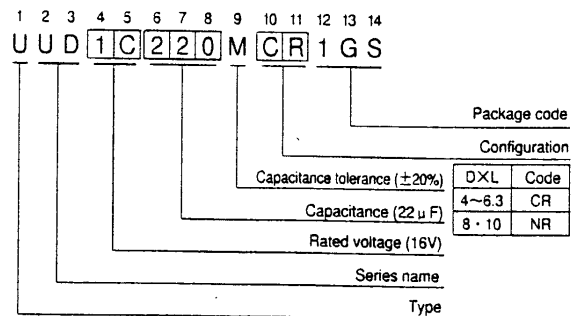
($\phi 4 \sim 6.3$)



($\phi 8, \phi 10 \times 10L$)



Type numbering system (Example : 16V 22 μ F)



	4X5.8	5X5.8	6.3X5.8	6.3X7.7	8X10	10X10
A	1.8	2.1	2.4	2.4	2.9	3.2
B	4.3	5.3	6.6	6.6	8.3	10.3
C	4.3	5.3	6.6	6.6	8.3	10.3
E	1.0	1.3	2.2	2.2	3.1	4.5
L	5.8	5.8	5.8	7.7	10	10
H	0.5~0.8	0.5~0.8	0.5~0.8	0.5~0.8	0.8~1.1	0.8~1.1

ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

UD series

■ Dimensions

Cap. (μ F)		V Code		DXL(mm)																		
				6.3			10			16			25			35			50			
		0J			1A			1C			1E			1V			1H					
1	010																	4X5.8	5.00	30		
2.2	2R2																	4X5.8	5.00	30		
3.3	3R3																	4X5.8	5.00	30		
4.7	4R7																	4X5.8	5.00	30		
10	100																	4X5.8	1.80	80		
15	150																	4X5.8	1.80	80		
22	220																	4X5.8	1.80	80		
27	270	4X5.8	1.80	80	5X5.8	0.76	150	5X5.8	0.76	150	5X5.8	0.76	150	5X5.8	0.76	150	5X5.8	0.76	150	5X5.8	0.76	150
33	330	5X5.8	0.76	150	5X5.8	0.76	150	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
47	470	5X5.8	0.76	150	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
56	560	5X5.8	0.76	150	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
68	680	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
100	101	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
150	151	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
220	221	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230	6.3X5.8	0.44	230
330	331	6.3X7.7	0.34	280	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450
470	471	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450	8X10	0.17	450
680	681	8X10	0.17	450	10X10	0.09	670	10X10	0.09	670												
1000	102	8X10	0.17	450	10X10	0.09	670															
1500	152	10X10	0.09	670																		
																		Case size	Impedance	Angle		

Max. impedance (Ω) at 20°C 100kHz, Allowable Ripple (mA rms) at 105°C 100kHz

● Frequency coefficient of allowable ripple current

Frequency	50 Hz	120 Hz	300 Hz	1 kHz	10 kHz~
Coefficient	0.70	1.00	1.17	1.36	1.50

● Taping Specifications are given in page 20.

Please refer to page 3 for the minimum order quantity.

■ Taping Specifications for Chip Type Capacitors (Applicable standard JIS C 0806)

● Carrier tape

Fig.1 For $\phi 3 \sim \phi 10$

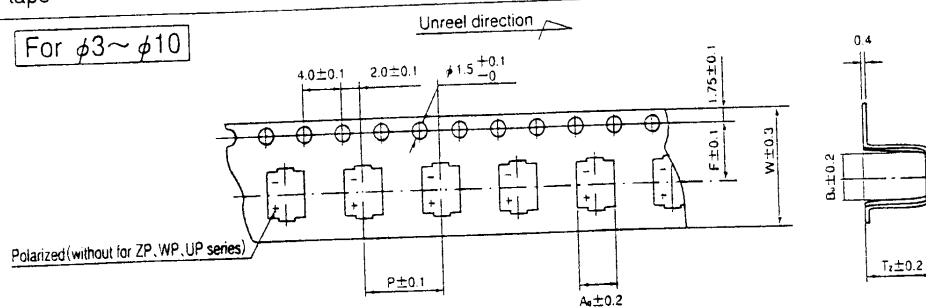
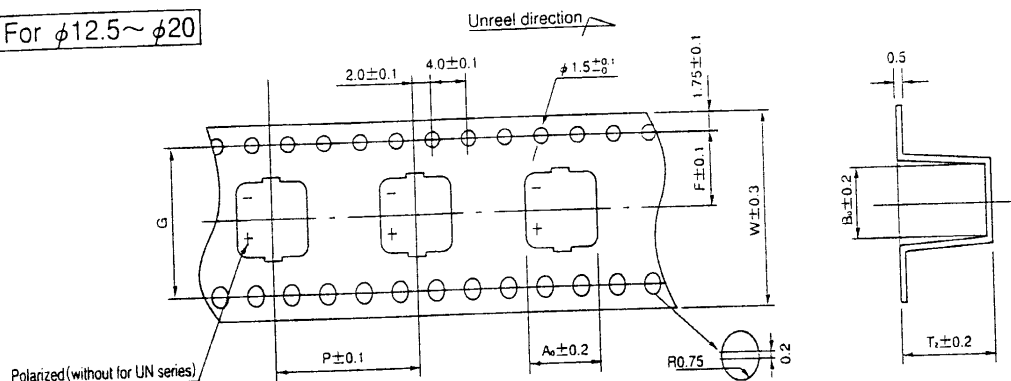
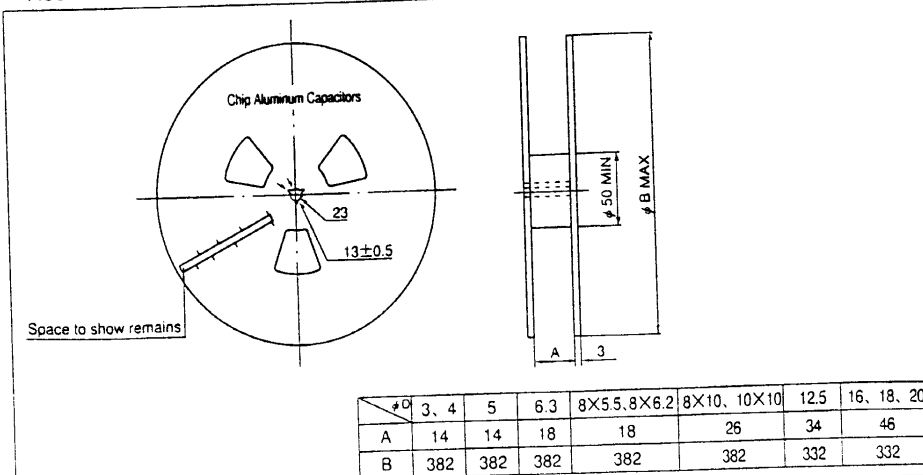


Fig.2 For $\phi 12.5 \sim \phi 20$



Size	Item							fig	Series
	W	P	F	A0	B0	T2	G		
$\phi 4 \times 3.95$ L	12.0	8.0	5.5	5.0	5.0	4.3	—	1	ZR
$\phi 5 \times 3.95$ L	12.0	12.0	5.5	6.0	6.0	4.3			
$\phi 6.3 \times 3.95$ L	16.0	12.0	7.5	7.0	7.0	4.4			
$\phi 4 \times 4.5$ L	12.0	8.0	5.5	5.0	5.0	4.9	—	1	ZS, ZP, ZT
$\phi 5 \times 4.5$ L	12.0	12.0	5.5	6.0	6.0	4.9			
$\phi 6.3 \times 4.5$ L	16.0	12.0	7.5	7.0	7.0	5.0			
$\phi 3 \times 5.5$ L	12.0	8.0	5.5	3.5	3.6	5.8	—	1	WX, WP, WT, WF
$\phi 4 \times 5.5$ L	12.0	8.0	5.5	5.0	5.0	5.8			
$\phi 5 \times 5.5$ L	12.0	12.0	5.5	6.0	6.0	5.8			
$\phi 6.3 \times 5.5$ L	16.0	12.0	7.5	7.0	7.0	5.8	—	1	WT, UT, UP, UV, UD, UR, UK
$\phi 8 \times 5.5$ L	16.0	12.0	7.5	8.7	8.7	5.8			
$\phi 4 \times 5.8$ L	12.0	8.0	5.5	5.0	5.0	6.3			
$\phi 5 \times 5.8$ L	12.0	12.0	5.5	6.0	6.0	6.3	—	1	WT, WF, UR, UX, UD, UB
$\phi 6.3 \times 5.8$ L	16.0	12.0	7.5	7.0	7.0	6.3			
$\phi 8 \times 5.8$ L	16.0	12.0	7.5	8.7	8.7	6.8			
$\phi 4 \times 6.2$ L	16.0	12.0	7.5	7.0	7.0	8.0	—	1	WT, WF, UR, UX, UD, UB
$\phi 6.3 \times 7.7$ L	16.0	12.0	7.5	7.0	7.0	8.0			
$\phi 8 \times 10$ L	24.0	16.0	11.5	8.7	8.7	11.0			
$\phi 10 \times 10$ L	24.0	16.0	11.5	10.7	10.7	11.0	28.4	2	UG, UJ, UN, UH
$\phi 12.5 \times 13.5$ L	32.0	24.0	14.2	14.0	14.0	14.0			
$\phi 12.5 \times 16$ L	32.0	24.0	14.2	14.0	14.0	16.3			
$\phi 12.5 \times 21$ L	32.0	24.0	14.2	14.0	14.0	21.3			
$\phi 16 \times 16.5$ L	44.0	28.0	20.2	17.5	17.5	16.8			
$\phi 16 \times 18.5$ L	44.0	28.0	20.2	17.5	17.5	21.8			
$\phi 16 \times 21.5$ L	44.0	28.0	20.2	17.5	17.5	21.8			
$\phi 18 \times 16.5$ L	44.0	32.0	20.2	19.5	19.5	16.8			
$\phi 18 \times 21.5$ L	44.0	32.0	20.2	19.5	19.5	21.8			
$\phi 20 \times 16.5$ L	44.0	36.0	20.2	21.5	21.5	17.0			
$\phi 20 \times 21.5$ L	44.0	36.0	20.2	21.5	21.5	22.0			

● Reel



Package quantity

ϕD	Q'ty/reel
3, 4	2000pcs.
5, 6.3	1000pcs.
6.3×7.7	900pcs.
8×5.5, 8×6.2	1000pcs.
8×10, 10×10	500pcs.
12.5×13.5	200pcs.
12.5×16	150pcs.
12.5×21, 16×16.5, 18×16.5	125pcs.
20×16.5	100pcs.
16×21.5, 18×21.5	75pcs.
20×21.5	50pcs.